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Liquor-yielding
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Besides from the cocoa-palm liquor is made from the *baini*, *Caryota urens*. This grows above the Sahyádris in the evergreen forests called *kans* in Siddápur, Sirsi, Yellápur, and Supa. A few are also found in the evergreen forests called *arnos* or *kans* in the coast subdivisions of Ankola and Honávar. The trees, which are Government property, are estimated at 48,900. Under the system introduced in August 1880 the right to tap these wild palms was sold at 1s. (8 *as.*) a tree. In 1881-82 the tree tax was raised to 4s. (Rs. 2) and in 1882-83 it was reduced to 3s. (Rs. 1½). During the year 1881-82, 13,300 trees were licensed. Very little liquor is distilled from the juice of the wild palm as it is both inferior and expensive.

Above the Sahyádris, where palm juice is not distilled, spirits are made from sugarcane juice flavoured with the bark of the *hevra* tree which is brought from Dhárwár.

The following list gives in alphabetical order the more important trees and shrubs of the Kánara forests with their botanical, Kánarese, and Maráthi names, and their chief uses¹:

Trees.

1. *ACACIA ARABICA*, *jáli K.*, *bábul M.*, is the well-known bábul tree. The wood is close-grained, dark-brown, hard, and tough. A cubic foot when seasoned weighs fifty-four pounds. It is good for carts, sugar and oil mills, and field tools, but is too crooked to make useful building timber. It yields much clear gum, and its bark is greatly used in dyeing and tanning. The pods and leaves form good fodder for sheep and cattle.

2. *ACACIA CATECHU*, *khairda K.*, *khair M.*, does not grow to a large size. The wood is very hard and strong, and is supposed to be as durable as teak. A seasoned cubic foot weighs close on eighty pounds. *Káth catechu* or *Terra japonica* is the thickened juice of its boiled wood.

3. *ACACIA CONCINNA*, *shige K.*, the soapnut tree. Its pods are used as soap and sell at £1 4s. to £2 (Rs. 12 - Rs. 20) the *khandi* of 560 pounds. Every other year comes a bumper crop with an outturn of about 1000 *khandis*, valued at £1200 (Rs. 12,000). The cost of gathering and bringing to market is about 12s. (Rs. 6) a *khandi*.

4. *ACACIA FARNESIANA*, *jali K.*, *iri bábul M.* The wood is hard and tough, and from the trunk gum oozes in considerable quantities.

5. *ACACIA LATEONUM*, *donn mullina jali K.*, *dev babul M.*, does not grow to any size, but is useful for tent pegs and for fences.

6. *ACACIA LEUCOPHLEA*, *bile jali K.*, *hivár M.* The wood is hard strong and much used. When seasoned a cubic foot weighs about fifty-five pounds. The bark is used in distilling, and yields a tough strong fibre which is used for fishing nets and cordage.

7. *ACACIA SUNDRA*, *kempu khairada* or *shemi K.*, *lál khair M.*, is much like the *Acacia catechu*. The wood is equally hard and tough, and when seasoned weighs about eighty pounds to the cubic foot.

£3 4s. (Rs. 32) for yearly interest at four per cent on a capital of £80 (Rs. 800) invested, making a total cost of £8 19s. 11½d. (Rs. 89-15-8), and yielding a net profit of £5 6s. ½d. (Rs. 53-0-4) a hundred or about 1s. ¾d. (*annas* 8½) a tree.

¹ A complete list of Kánara trees prepared by Mr. W. A. Talbot, Assistant Conservator, is given in the Appendix.

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8. *ACHRAS SAPOTA*, *kumpole* K., is a large cultivated tree with dull red wood, short but straight in the grain, and very dense. It is apt to split if not well seasoned. The fruit is pickled and eaten with curries.

9. *ADENANTHERA PAVONINA*, *manjuti* K., and M., is a large tree, whose wood, though tough and said to be good, is not in general use in Kánara. A seasoned cubic foot weighs fifty-six pounds. It yields a red dye which is used by Bráhmans to mark their foreheads, and jewellers use the scarlet seeds as weights.

10. *ADINA CORDIFOLIA*, *yettagal* K., *hedu* M., an immense and very common tree, yields a yellow close grained wood which, though liable to crack if not properly seasoned, is very valuable for building and for furniture. A seasoned cubic foot weighs about forty-two pounds.

11. *ÆGLE MARMELOS*, *belpatri* K. and M., the bael tree, is sacred to Shiva and is never cut. The wood is poor though close-grained. A seasoned cubic foot weighs about forty-three pounds. The fruit is used in diarrhoea and dysentery.

12. *AILANTHUS MALABARICA*, *guggula dhupada* K. and M., is a large tree whose resin is burnt as incense in Hindu temples. The wood is useless.

13. *ALANGIUM LAMARKII*, *ansaroli* K., *ankul* M., is a small tree or climber with yellow-brown hard and tough wood which weighs forty-nine pounds to the cubic foot. The fruit is eaten, though astringent and acid, and the root is a native medicine.

14. *ALEURITES MOLUCCANA*, Belgaum walnut, *akrod* K., is an ornamental tree with poor timber. The kernel yields a fine clear oil.

15. *ALBIZZIA AMARA*, *bilkambi* K., *lali* M., has a short thick trunk with many heavy branches. The tree is common and yields dark-brown, close-grained, and very strong and durable timber, one of the most favourite woods in Kánara. A seasoned cubic foot weighs about seventy pounds.

16. *ALBIZZIA LEBBEK*, *godda hunshe* K., *siras* M., is common and in general use. A seasoned cubic foot varies in weight from thirty-eight to fifty-three pounds. A dark gum oozes from wounds in the bark.

17. *ALBIZZIA PROCERA*, *belláti* K., is a large tree, which yields excellent timber and is in great request.

18. *ALBIZZIA STIPULATA*, *bagana* K., is a very pretty tree whose wood is believed to be good.

19. *ALSEODAPHNE SEMICARPIFOLIA*, *neltháre* K., *phudgus* M., is a large and handsome tree whose excellent wood has the special value of resisting the attacks of white-ants. A seasoned cubic foot weighs fifty-two pounds.

20. *ALSTONIA SCHOLARIS*, *kodáls* K., *sátrín* M., is a large up-standing tree whose soft wood is useless except for making boxes. A seasoned cubic foot weighs about forty pounds.

21. *AMOORA LAWII*, *madarasada* K., *boramb* M., is a moderate-sized overgreen tree.

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22. *ANOGEISSUS LATIFOLIA*, *dindal* K., *dhaura* M., is moderate-sized on the outskirts of forests, but very large in-favourable spots among other lofty trees. The wood is light and sometimes beautifully mottled and veined; hard, close-grained, and very tough and elastic. A seasoned cubic foot weighs sixty pounds. The people hold it in great esteem, using it for all field-tools and for certain parts of their carts. From the bark oozes a fine gum like the *Acacia arabica* gum.

23. *ANTIARIS INNOXIA*, *ajjanapatte* K., *khavat* M., is a tree of great size, but with soft worthless wood. The bark yields strong fibre suited for cordage, matting, and sacking. In making sacks a branch or trunk is cut to the required length, soaked in water, and beat till the fibre separates from the wood. It is then turned inside out, and the wood sawn off except a small piece at the bottom. The fruit is intensely bitter.

24. *ANACARDIUM OCCIDENTALE*, *godambe* K., *káju* M., is the well known Cashew tree. The wood is of no value except for charcoal. The pericarp of the nut yields a bitter oil which is used as a caustic. A clear gum not inferior to gum arabic oozes from the trunk and is used as varnish. The roasted kernels are a well-known dessert dish. They also yield an oil. The enlarged crimson pedicel is also eaten and has a pleasant bitter flavour.

25. *APOROSA LINDLEYANA*, *salle* K., is a middle-sized, very straight tree, much used for rafters.

26. *ARECA CATECHU*, *adike* K., *pophali* M., the betelnut palm, rises in a straight slender stem fifty to eighty feet high. It makes excellent rafters and shed-posts. The nut, which is chewed and used in many religious ceremonies, forms one of the chief articles of trade in Kánara.

27. *ARTOCARPUS HIRSUTA*, *hebbalasina* K., *pát phanas* M., is a very large and handsome evergreen tree whose massive trunk occasionally rises straight and clean-stemmed for 150 feet. It yields the *anjili* wood of commerce and is equally valuable for ship and house building. A seasoned cubic foot weighs about forty pounds. The fruit is eaten.

28. *ARTOCARPUS INTEGRIFOLIA*, *halasina* K., *phanas* M., the well known Jack, is both cultivated and found wild in the evergreen Sahyádrí forests. The trunk grows to a great girth. The wood is yellow when cut but gradually darkens. It becomes beautifully mottled with time and takes as fine a polish as mahogany. A seasoned cubic foot weighs forty-two pounds. It is used for building and for furniture. The fruit weighs up to sixty pounds and is much used by the people. The roasted seeds are not unlike chestnuts, and in bad seasons are often the only food of the poorest hill people.

29. *ARTOCARPUS LAKOOCHA*, *vonte* K., *votamba* M., has soft and poor wood and a fruit which is eaten in curries.

30. *ATALANTIA MONOPHYLLA*, *kán limbe* K., *mákad limba* M., is a small tree found in the evergreen forests. Its wood is close-grained and heavy, but is not generally used.

31. *BAMBUSA*, *biduru gala*, *medar gala*, *kiribiduru gala*, *sheme biduru gala*, *vonte biduru gala*, *galagiu kaddi* K., is one of the most

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useful of forest products. The large or *biduru gala* bamboo is used in building, for masts of native vessels, spars, yards, and boat-decking, tent-poles, scaffolding, floors, bridges, ladders, water-pipes, for floating timber, hollow cases, waterbuckets, and many other purposes. The middle-sized or *medar gala* bamboo is used in house building, floors, masts and spars for small boats, boat-decking, and scaffolding. It is also split to make walls for houses, matting, and baskets. The *kiri-biduru gala* bamboo is used for battens, roofing, flooring, decking, spear-handles, and walking-sticks. They are also split and used for various other purposes. The *shemo biduru gala* bamboo is solid and used for roofs, battens, floors, and spear handles. The *wonte biduru gala* bamboo is used for flutes, matting, and baskets, and the *galagu kuddi* bamboo for pens. The large bamboo takes ten to fifteen years to reach its full size. When full grown the shoots rise from the root seventy to ninety feet in one season. Beddome is of opinion that the large bamboo seeds and dies after thirty-two years, but according to the people of Kánara it does not seed until it reaches the age of fifty or even sixty years. Other bamboos seed at periods varying from seven to thirty years, the *medár gala* living next longest to the *biduru gala*. The seed or grain of the large bamboo or *biduru gala* is gathered and eaten and in the scarcity of 1865-66 thousands of people flocked from Dhárwár, Belgaum and Linsgur in Maisur to gather and carry it to their homes. In both these years thousands of lives were saved by the timely seeding of the large bamboo. The seed is more like wheat than rice and is very heating. The bamboos of certain tracts, sometimes several square miles wide, seed at the same time. In Kánara the last general seeding began in 1864 and ended in 1875. The root of the large bamboo ceases to send up shoots one season before it flowers. The middle-sized bamboo or *medar gala* also seeds at the same time over large tracts. Its seed is also gathered and eaten.

32. *BARRINGTONIA ACUTANGULA*, *hole kauva* K., *mánkumba* M., is a moderate-sized tree, common along streams and in moist places. The wood is reddish, and though tough and strong is not in general use. A seasoned cubic foot weighs fifty-six pounds. The bark is used to stupefy fish.

33. *BASSIA LATIFOLIA*, *ippe* K., *moha* M., grows to a good size. In other parts of India the wood is said to be strong and durable, but in Kánara it is not used. A cubic foot of seasoned wood weighs sixty-one pounds. The flowers are eaten and used in making a spirit. A gum oozes from wounds in the bark.

34. *BASSIA LONGIFOLIA*, *huli ippe* K., *moha* M., grows to a good size. The wood is not used, but the seeds yield an oil that would make candles and soap.

35. *BAUHINIA LAWII*, *basavanpad* K., is a large shade-tree with soft useless wood.

36. *BAUHINIA PURPUREA*, *sheádla* K., *kanchan* M., is a small tree with strong wood, but seldom large enough for building.

37. *BAUHINIA RACEMOSA*, *banne* K., *ápta* M., is a moderate-sized tree with strong close-grained wood. A seasoned cubic foot weighs fifty-six pounds.

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38. *BAUHINIA VARIEGATA*, *mandar* K. and M., is an ornamental tree with variegated flowers and hard serviceable wood, but seldom large. The bark is used in tanning and dyeing.

39. *BIXA ORELLANA*, *arnattu* K., is common in gardens. It yields a good orange dye.

40. *BOMBAX MALABARICUM*, *burla* K., *sáyar* M., has an immense stem, straight, round, and of great length. The wood is soft and useless. A dark gum oozes from the wounds in the bark and the fruit is gathered for its cotton.

41. *BORASSUS FLABELLIFORMIS*, *tále* K., *talat mád* M., the Palmyra palm, is grown in gardens. Its hard and lasting outer wood is used in building and for water pipes. The leaves make excellent thatch, and the sap is either boiled into sugar or fermented and distilled.

42. *BRIEDELIA MONTANA*, *ásana* K., *kaunchi* M., gives an excellent timber fit for building, sleepers, and furniture, standing exposure well. A seasoned cubic foot weighs sixty pounds.

43. *BRIEDELIA RETUSA*, *nullu honne* K., *kánta kauchi* M., grows to a large size. The wood is strong, tough, and stands water. It is used in building and for well frames.

44. *BUCHANANIA LATIFOLIA*, *nurkal* K., *chár* M., is a moderate-sized tree. The heartwood is hard, but the rest of the wood is poor. A seasoned cubic foot weighs thirty-six pounds. The fruit is dark purple and is pleasant to the taste. An oil is expressed from the seed.

45. *BUTEA FRONDOSA*, *muttala* K., *phalas* M., is very common and strikingly handsome when covered with its scarlet blossoms. The flowers yield a yellow dye, and the juice is one of the kino gums. The lac insect is often found on its branches. The wood is coarse and poor. A seasoned cubic foot weighs thirty-three pounds.

46. *CALOPHYLLUM ELATUM*, *sur-honne* K., *nágani* M., is a magnificent evergreen tree often growing 150 feet high, the stem straight, of great girth, and from eighty to a hundred feet to the first branch. It yields the poonspars so much used for masts. The wood is reddish and coarse-grained but ornamental. A single tree has been known to fetch more than £100 (Rs. 1000): The seed yields an oil.

47. *CALOPHYLLUM INOPHYLLUM*, *vuma* K., *undi* M., is moderate-sized on the coast, but often very large in the forests. The wood is coarse but useful, and the seed yields an excellent much-used oil for which along the coast the tree is grown.

48. *CALOPHYLLUM WIGHTIANUM*, *bobbi* K., *irai* M., is a large tree found along streams and in moist places. The wood is coarse but strong and ornamental. The seed yields an oil scarcely inferior to the oil of the *Calophyllum inophyllum*.

49. *CALOSANTHES INDICA*, *tetu* K. and M., is a small tree with poor wood. The bark and fruit are used in tanning.

50. *CANARIUM STRICTUM*, *rál-dhupadā* K., *rál dhup* M., is a beautiful evergreen tree known to Europeans as the black dammer. Its resin or dammer is used in medicine.

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51. *CÆSALPINIA SEPIARIA*, Maisur thorn, Ver. *chillar*, is a prickly bush with yellow flowers, forming impassable thickets in many places, often where the bamboos seeded in 1865-66. The young pod contains an essential oil.

52. *C. NUGA* is a common climber along the sides of tidal creeks.

53. *C. CORIARIA*, Ver. *divi-divi*, is a small thornless tree whose pods yield a tanning material. It has been introduced into Dhárwár, Belgaum, and Kánara. The wood is not in general use.

54. *CANTHIUM DIDYMUM*, *yellal* K., *arsul* M., is a handsome evergreen tree with close-grained, hard, and heavy wood, yellowish with central masses of black.

55. *CAPPARIS GRANDIS*, *toráte* K., *kauntel* M., has small wood but close-grained and good for turning. It yields an oil which is used in medicine and for burning.

56. *CARALLIA INTEGERRIMA*, *andermurgal* K., *panasi* M., has reddish brown timber, rather brittle, but very ornamental.

57. *CAREYA ARBOREA*, *kaval* K., *kumbia* M., is crooked and stunted on the outskirts of the forests but with other large trees grows to a considerable height and girth. The wood, though strong and tough, is not generally used, except the heartwood for ploughs. A seasoned cubic foot weighs about fifty pounds. The bark yields a coarse strong cordage. The fruit is eaten by cattle.

58. *CARYOTA URENS*, *baini* K., *berli* M., the Indian sago-palm, is abundant in the evergreen Sahyádrí forests. The wood is fibrous, hard, and in general use for field-tools. The trunk is used for water-courses. The pith yields a sago, the fermented or distilled juice an intoxicating drink, and the leaves a fibre.

59. *CARISSA CARANDAS*, Ver. *coronda*, is a bush whose fruit is much esteemed and is excellent in tarts.

60. *CASSIA AURICULATA*, *talvád* K. and M., is a bush or small tree very common in the lower hill slopes and plains. The bark is much used for tanning.

61. *CASSIA FISTULA*, *kakkai* K., *báya* M., is remarkably handsome with its hanging bunches of primrose flowers. In the inland forests it grows to a considerable size, but it is dwarfed towards the plain country where the rainfall is scanty. The wood is extremely good, being exceedingly hard and tough and beautifully mottled. It takes a good polish and is well suited for furniture. A seasoned cubic foot weighs fifty-four pounds. The pulp that fills the pod is a strong purgative used both by Europeans and natives. A-gum oozes from wounds in the bark.

62. *CASSIA FLORIDA*, *sirsal* M., is a handsome and excellent roadside tree. The wood is dark but brittle and perishable. A seasoned cubic foot weighs fifty-eight pounds.

63. *CASUARINA EQUISETIFOLIA*, *sura* K., was introduced into India about the beginning of the present century and is now well established. It thrives best on sandy tracts along the sea shore. It

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is of rapid growth and yields an excellent heavy and hard dark-brown wood. A plantation formed near Kárwár a few years ago is succeeding well.

64. CEDRELA TOONA, *tundu* or *devdari* K., *toḍu* M., grows to a considerable size. The timber is reddish brown, light, even, but open-grained and fairly strong. It seasons readily, is easily worked, and takes a fine polish. It is very fragrant when cut. A seasoned cubic foot weighs thirty-one pounds. It is much used for furniture. A red or yellowish dye is made from the flowers.

65. CELASTRUS MONTANA, *málkanguni* K., *hanmachá jhád* M., is a small and very common tree. The wood is fairly good, though not much used.

66. CHICKRASSIA TABULARIS, *dul* or *devdari* K., *pabba* M., is an immense tree, one of the largest of the many large Kánara evergreens. It is often found up to twelve feet in girth with a clean, thick, and straight trunk fifty to eighty feet to the first branch. It is the Chittagong wood of commerce and from its fresh cedar-like smell is called *lal* or *devdari* in Kánara. The wood is dark coloured and close in the grain. It is used for every purpose and is much valued. A seasoned cubic foot weighs forty-two pounds.

67. CHLOROXYLON SWIETENIA, *mashvála* K., *halda* M., is not found in Kánara, but is common, though small, in parts of Belgaum and Kaládgi, where it is known under the name of *mashvála*. The wood is close-grained, hard, and durable; excellent for turning or any fancy work which does not require large-sized wood. It is highly prized by the people. A seasoned cubic foot weighs about fifty-eight pounds.

68. CHRYSOPHYLLUM ROXBURGHII, *hale* K., *tursiphal* M., is a good sized tree. The wood is employed in house-building, but is not by any means in general use. The fruit is eaten.

69. CINNAMOMUM TAMALA, *dalchinne* K., *dálchini tiki* M. A very common evergreen forest tree of moderate size. The wood is poor and is not used. The bark is also inferior and is not the true cinnamon of commerce. An aromatic oil extracted from the fruit and leaves is used as a medicine.

70. CORDIA MYXA, *chella* K., *bhokur* M., is a middle-sized tree. The wood is inferior and is not in general use. A seasoned cubic foot weighs about forty pounds. The bark is made into ropes and the fibre is used in caulking boats. The fruit is eaten as a vegetable and pickled.

71. CORYPHA UMBRACULIFERA, *tále* K., *táli* M., is known as the Talipat palm. It grows sixty to seventy feet high. The beaten pith yields an edible flour, the leaves are made into umbrellas, and the seeds, a species of vegetable ivory, are an article of trade with the Arabs who visit the coast and buy them at rates varying from-£2 to £2 10s. (Rs. 20-Rs. 25) the *khandi* of 616 pounds.

72. CISSUS DISCOLOR is a beautiful climber, common in the rains in Kánara. It requires a moist climate. The leaves are differently coloured above and beneath.

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73. CITRUS MEDICA, Ver. *limbu*, the common bitter lime, is much grown in the Sahyádrí villages.

74. CITRUS DECUMANA, the pomelo, is grown throughout Kánara and reaches great perfection.

75. CITRUS AURANTIUM, Ver. *god náring*, the sweet orange, is grown throughout Kánara but does not produce superior fruit.

76. CLEMATIS GOURIANA, a creeper, is found everywhere in the Southern Marátha Country. It flowers in the cold season.

77. CLERODENDRON INFORTUNATUM, a common shrub found as undergrowth in the Kánara forests.

78. C. INERME, a climbing shrub found on the coast where it forms dense thickets.

79. CRATEVA RELIGIOSA, Ver. *bitusi*, is a moderate-sized tree with trifoliate leaves and large handsome flowers. It is found on the Sahyádris. The wood is yellowish white, tough, and durable.

80. DALBERGIA LATIFOLIA, *bite* K., *sisu* M., is the well-known blackwood tree. The timber is one of the most valuable in India; it is strong, very hard, close-grained, and of a purple black. It takes a beautiful polish and is reckoned the best furniture wood. A seasoned cubic foot weighs fifty pounds.

81. DALBERGIA PANICULATA, Ver. *padri*, a soft-wooded tree, is common in the dry forests of Dhárwár and Kánara. The wood is divided by more or less complete rings of soft tissue which is used as firewood.

82. DESMODIUM TRIQUETRUM is a shrub common throughout Kánara. The pods are covered with bent hairs and stick fast to anything with which they come in contact.

83. D. PULCHELLUM is a common shrub which flowers in the rains.

84. DILLENIA PENTAGYNA, *kanagala* K., *karmal* M., is a moderate-sized tree and very common. Whatever may be thought of it elsewhere, in Kánara the wood is considered useless except for burning. The fruit, which as a rule is most abundant and falls during May, is greedily eaten by all animals both wild and tame.

85. DIOSPYROS EBENUM, *kare* K., *abnis* M., is a moderate-sized rather uncommon tree. The heartwood is generally jet black and very heavy. A seasoned cubic foot weighs eighty-one pounds. It is one of the trees which are not allowed to be cut.

86. DIOSPYROS MELANOXYLON, *balai* K., *tumri* M., is a middle-sized tree. Only the heartwood of old trees contains ebony, and even that is streaked with dull yellow lines. The wood, though strong tough and fairly durable, is not held in much esteem. A seasoned cubic foot weighs fifty to seventy pounds. The fruit when perfectly ripe has a pleasant taste and is much liked.

87. DIOSPYROS MONTANA, *tendu* K. and M., is a small tree of the ebony kind with black and variegated streaks towards the heart. The wood is pretty strong but is not much used.

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88. *DIPLOSPORA APIOCARPA*, *báchange* K., *paniyara* M., is a large evergreen tree whose wood is used to make combs and toys.

89. *DIPTEROCARPUS INDICUS*, *challáns* K., is an immense evergreen tree which, when tapped, yields an oil of considerable value. The wood is coarse-grained, soft, and seldom used.

90. *DODONÆA VISCOSA*, Ver. *bandurgi*, is a very common shrub growing over large areas in Dhárwár. The leaves are covered with bright yellow resin, but it is not put to any use.

91. *ELGEOCARPUS TUBERCULATUS*, *rudrák* K., is a very large tree found in the Sahyádris. The seeds are made into rosaries by some Bráhmans. The wood is not used.

92. *ELAEODENDRON ROXBURGHII*, *thámaroja* K., is a tree of fair size. The wood is not strong, but it is used for combs and picture frames.

93. *ERINOCARPUS NIMMONII*, *haladi adavi bhende* K., is a small tree whose wood though soft is used for yokes, and the bark makes excellent ropes.

94. *ERIODENDRON ANFRACTUOSUM*, *bile burlu* K., *pándhari sávar* M., the white cotton tree, though fairly large does not grow to the same size as the *Bombax malabaricum*. The pods are gathered for their cotton. The wood is useless except for making toys.

95. *ERIOLENA HOOKERIANA*, *hadang* K., is a small tree with very tough wood commonly used for axe handles.

96. *ERYTHRINA SUBEROSA*, Ver. *pangra*, is a very common middle-sized tree with corky bark. Its white soft wood is used for planking.

97. *ERYTHRINA INDICA*, *mullu muttala* K., *pangara* M., is a tree of moderate size whose soft wood is only used to make toys and boxes.

98. *EUGENIA JAMBOLANA*, *nerlu* K., *jambul* M., is a very large and beautiful tree. The wood is in general use for house-building, carts, field-tools, and a variety of purposes; it stands the action of water and is used for well frames. It is fairly close-grained, not very strong or lasting except in water, and in colour a dirty brown. A seasoned cubic foot weighs forty-eight pounds. The fruit is eaten.

99. *EHRETIA LAVIS*, *adak* K., is common on the Sahyádris. The wood is strong and hard.

100. *EUGENIA ZEYLANICA*, *nerkal* K., *bhedas* M., is a middle-sized tree common in stréams. The wood is in use for house-building and for field tools.

101. *EUPHORIA LONGANA*, Ver. *vumba*, is a rather large tree whose wood is hard but splits and does not bear exposure. It is not much used.

102. *EUPHORBIA NERIIFOLIA*, a small thorny tree with leaves at the ends of the angular spiral branches. It is much used as a hedge plant in Dhárwár and Belgaum.

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103. *E. TIRUCALLI*, Ver. *neuli*, the milk-bush, is the well known hedge plant with bitter milk-like juice.

104. *FERONIA ELEPHANTUM*, *kovit* M., the wood-apple tree, is generally found in comparatively dry parts of the district and near gardens. The wood, which is hard strong and lasting, is used for a variety of purposes. A gum oozes from the tree not unlike gum arabic. The pulp of the fruit makes good jelly and the leaves are used in medicine.

105. *FICUS ASPERRIMA*, *khargas* K., *khavat* M., is a middle-sized tree with poor unused wood. The leaves are in general use to polish horns and as sand-paper.

106. *FICUS RETUSA*, *pinval* K., *nándruk* M., is a handsome shade-giving tree, excellent for roadsides. The wood is soft and useless.

107. *FICUS GLOMERATA*, *atti* K., *rumadi* M., is both cultivated and found in evergreen forests. The wood is inferior, but is often used for doors and well frames. The fruit is eaten and the leaves bark and fruit are used in native medicines. A seasoned cubic foot weighs about thirty-one pounds.

108. *FICUS BENGALENSIS*, *álada* K., *vad* M., the well known banyan or Indian fig, grows to a great size and often shades a space 150 feet and more in diameter. The banyan sends aërial roots from the branches which taking hold of the soil grow into trunks. These roots are very elastic tough and strong and are used for tent-poles, poles for carrying loads, and cart yokes. The wood is sometimes used for doors and well frames. A seasoned cubic foot weighs about thirty-three pounds. It is an excellent roadside tree, giving great shade and suiting itself to almost any soil. In forests the different varieties of fig do much harm. The birds leave seeds in the forks of trees, where they sprout and sending down their roots gradually encircle and destroy the tree. No fig tree should be allowed to live in a carefully preserved forest.

109. *FICUS RELIGIOSA*, *arle* K., *pippal* M., grows to a good size but is not a first class roadside tree, as its shade is scanty and it is not easily raised from cuttings. It is held sacred by almost all classes of Hindus. The wood is inferior and is not used.

110. *FICUS SPECIOSA*, *basari* K., a rather thick-set variety bearing small fig-shaped fruit, is found near streams. The wood is said to be tough and to stand the action of water.

111. *FICUS WIGHTIANA*, *pimpri* K., a tree of considerable size but not so common as the other varieties. The wood is inferior like all fig wood, and the fruit is small and yellow.

112. *FLACOURTIA MONTANA*, *hannu sampige* K., *champer* M., is a middle-sized tree, with red strong and durable wood, and edible fruit.

113. *GARCINIA MORELLA*, *arsina gurgi* K., *darámba* M., is a middle-sized tree found in the southern evergreen forests. This is the true gamboge of commerce. The wood is hard and close-grained but is not in general use.

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114. *GARCINIA PICTORIA*, *hardūla* K., grows in evergreen forests and is far commoner and larger than the *G. morella*, to which it is allied. The resin that oozes from the trunk has been analysed at Madras and is said to equal the true gamboge.

115. *GARCINIA PURPUREA*, *murgala* K., *bhirand* M., common in and near evergreen forests, is not large; its lemon-coloured wood is straight-grained and elastic. The fruit is eaten, and a concrete oil called *kokam* is made from the seeds and used as a medicine and in cooking.

116. *GARDENIA LUCIDA*, Ver. *dipamāli*, is a small tree with large white flowers. The wood is white, fine-grained, and good for turning. Its resin is useful in the treatment of sores and for keeping off flies and worms.

117. *GARUGA PINNATA*, *halabālage* K., *kudak* M., is a moderate-sized tree, whose timber is poor and is little used except for fuel. The bark is used in tanning and a gum oozes from the trunk. The fruit is eaten both raw and pickled. A seasoned cubic foot weighs fifty-two pounds.

118. *GIVOTIA ROTTLEIFORMIS*, *polki* K., a rather small tree, is common in dry forests. The wood is light and soft and in Gokāk and other places is used to make toys. It takes paint well and the seeds yield a valuable oil.

119. *GLOCHIDION SPECIOSA*, *nirchelli* K., does not grow to any size, and has worthless timber.

120. *GMELINA ARBOREA*, *shivani* K., *shivan* M., is a large and valuable tree. The wood is whitish, strong, and close-grained, but not heavy. A seasoned cubic foot weighs thirty to forty pounds. It does not crack in seasoning and takes paint and varnish well. It stands water well and on the whole is one of the most valuable of Kánarese woods. The fruit bark and roots are used in native medicines.

121. *GMELINA ASIATICA*, *kal-shivani* K., *láhán shivan* M., is a small tree with very hard wood.

122. *GREWIA OBLIQUA*, *darsuk* K., *pándhari dháman* M., is a middle-sized tree. The wood is used for field tools and posts and ropes are made from its fibre.

123. *GREWIA TILIIFOLIA*, *dadsal* K., *dháman* M., is a tree of considerable size. The wood is a light reddish brown, compact, close-grained, and very elastic. A seasoned cubic foot weighs thirty to forty pounds. It is excellent for coach building.

124. *GREWIA LEVIGATA*, *kaori* K., is a small tree yielding a favourite fibre.

125. *HARDWICKIA BINĀTEA*, *karacho* or *asana gurgi* K., *anjun* M., is a handsome straight-growing tree. The wood is a dark reddish brown, close-grained, hard and heavy. A seasoned cubic foot weighs about seventy-six pounds. The bark yields an excellent fibre which is strong and used for cordage. Cattle are very fond of the leaves.

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126. *HETICTERES ISORA*, *kavargi* K., *kevan* M., is a small tree whose bark yields a fibre which is made into coarse cordage and sacking.

127. *HEMIGYROSA CANESCENS*, *kálu yatle* K., *lokhandi* M., is a common good-sized tree, with hard whitish wood which is used in house-building.

128. *HEYNIA TRIJUGA*, *koro* K., *khoro* M., is a moderate-sized tree with straight trunk. The wood is soft and not used.

129. *HOCOMLIA MONTANA*, *sampage* K., *támbat* M., is seldom large. The wood is white hard and tough, and is used for field-tools.

130. *HOLIGARNA LONGIFOLIA*, *hole ger* K., *sudra bibo* M., is a large tree. The timber is soft and is not used except for native boats. The fruit and bark are used in medicine and yield an excellent black varnish.

131. *HIBISCUS FURCATUS* is a prickly climber common on the Sahyádris. It flowers beautifully in the cold season.

132. *HOPEA WIGHTIANA*, *haiga* K. *kavsi*, M., is a tree of considerable size. The wood is good, very hard and lasting, and much used.

133. *HYDNOCARPUS ALPINA*, *toratti* K., *kástel* M., is a large handsome tree, whose wood makes good beams and rafters. The seeds yield an oil which in Kárwár is used for burning.

134. *HYMENODICTYON OBOVATUM*, Ver. *kárví* is a large handsome tree, with a close-grained pale mahogany coloured wood. It deserves attention.

135. *IXORA COCCINEA*, flame of the woods, is a common bush, always covered with red flowers.

136. *IXORA PARVIFLORA*, *hennu gorvi* K., *khura* M., is a small ornamental tree known as the torch tree. The wood is of a reddish brown, close-grained, and used for buildings and furniture. A seasoned cubic foot weighs sixty-six pounds.

137. *JASMINUM LATIFOLIUM* is a common climber with handsome, white, sweet-smelling flowers.

138. *KYDIA CALYCINA*, *bellaka* K., *iliya* M., is a small tree whose wood is used for yokes. It yields a fibre.

139. *LAGERSTÆMIA MICROCARPA*, *bile nandi* K., *nána* M., is a large and handsome tree, very common all over Kánara. The wood is light-red straight-grained and excellent for house building; but if exposed it decays and is rapidly attacked by white-ants. A cubic foot of seasoned wood weighs thirty-seven pounds.

140. *LAGERSTÆMIA PARVIFLORA*, *channangi* K., *bondára* M., grows to a moderate size and is not so common as *L. microcarpa*. The wood is light brown, close-grained, straight, and fairly durable. It is in general use for house building and all ordinary purposes. A cubic foot weighs forty pounds.

141. *LAGERSTÆMIA REGINAE*, *hole dásál* K., *táman* M., is a large and very ornamental tree. It is common along the Kálinadi river and when in blossom in May its rich masses of rose purple and lilac are strikingly handsome. The wood is a light red fairly strong and

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much used. A seasoned cubic foot weighs thirty-six to forty-seven pounds.

142. *LASIOSIPHON ERIOCEPHALUS*, *rámi* K., *rámíta* M., is a small tree very common along the Sahyádris. The leaves are bruised and thrown into pools to stupefy fish. The people believe that the wood or its ash destroys the teeth and are most careful not to use it.

143. *LINOCIERA MALABARICA* is a small tree common in the evergreen Sahyádrí forests near Bára.

144. *MABA NIGRESCENS*, *kari* K., *kála jhád* M., is a small but remarkably hard and strong evergreen. It is particularly prized for round rafters in native houses.

145. *MACARANGA TOMENTOSA*, *chandkal* K., *chandora* M., is a large tree with soft useles wood. A gum oozes from the bark which is used in medicine.

146. *MACHILUS MACRANTHA*, *gumáva* K., is a large and handsome evergreen tree. The wood is not used but would answer for boards.

147. *MALLOTUS PHILIPPINENSIS*, *kunkuma* K., *shindur* M., is a small tree. The wood is not used except as fuel; the bark is valued for tanning, and the red powder of the capsules yields an orange dye.

148. *MANGIFERA INDICA*, *mavína* K., *amba* M., is the well known mango tree. The wood is of little value except for boards and fuel. It decays at once if exposed. The tree is largely grown for its fruit and gives excellent shade.

149. *MELASTOMA MALABARICUM* is a shrub with opposite hairy three-nerved leaves, which is common in Kánara above and below the Sahyádris. The fruit is edible.

150. *MELIA AZEDARACH*, *bevína* K., *mem* M., is a moderate-sized tree grown in the dry east beyond the regular forests. It is also found self-sown in hedge-rows and over the low hills. The heartwood varies in shade according to the age of the tree, being sometimes light and often reddish. The older trees yield good building timber. A seasoned cubic foot weighs thirty pounds. The bark, leaves, and fruit are intensely bitter and are used in native medicines. The seeds yield an oil and the wood is safe against white-ants.

151. *MELIA COMPOSITA*, *kari bevin* K., *kariyápát* M., is a larger and finer tree than *M. azedarach*, but with much the same properties. It is found nearer to and sometimes in the forests. The wood also is darker and better marked, being sometimes beautifully mottled; it is safe against white-ants.

152. *MELIA INDICA*, *kare uttatte* K., *kadu khájur* M., is a large and handsome tree found along the Sahyádris. Some very fine specimens are to be seen along the road at the top of the Anshi pass and again at Sonda between Yellápur and Sirsi. The wood is dark and beautifully mottled. It is not felled for building purposes, but the leaves, fruit, and bark are used in medicine, and for the same purposes as the other two varieties. It is also like them free from the attacks of white-ants.

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153. *MEMECYLON UMBELLATUM*, *limbtoli* K., *limba* M., is a small tree common on the Sahyádris. The wood is hard and tough, and the flowers yield a dye.

154. *MESUA FERREA*, *nága sampige* K., *nága chámpa* M., is a handsome tree with fragrant flowers. The wood is very hard and heavy though not much in use. A seasoned cubic foot weighs sixty-nine pounds.

155. *MICHELIA CHAMPACA*, *kola sampige* K., *kud chámpa* M., is grown for its sweet-scented flowers which are used in temples. The wood is said to be good, but it is not used.

156. *MIMUSOPS ELENGI*, *bakule* K., *vovali* M., is a large and ornamental tree. The wood is reddish brown and close-grained, and takes a good polish. It is used for house building and cabinet-making. A seasoned cubic foot weighs sixty-one pounds. The seeds yield an abundance of oil and the root and fruit are used in medicine.

157. *MOROCARPUS LONGIFOLIA*, Ver. *karával*, is a small tree yielding a fibre.

158. *MORINGA PTERYGOSPERMA*, *nugge* K., *shevgi* M., the horse radish tree, has soft useless wood not even good for fuel. The seeds yield a pure sweet oil which is used in salads. The sap which oozes from wounds in the bark is used in rheumatism.

159. *MORINDA EXSERTA*, *akk* or *ainshi* K., is a moderate-sized tree with bright yellow wood. The root yields a yellow and red dye and the wood is made into dishes.

160. *MUSSENDA FRONDOSA*, Ver. *bebana*, is a large handsome shrub, part of whose calyx forms what looks like a large white leaf.

161. *MYRISTICA LAURIFOLIA*, *jájikái* K., *jáyaphal* M., the wild nutmeg tree, grows to a great size, but only in evergreen forests. The nutmeg and mace are of little value, and the wood is soft and useless.

162. *NAUCLEA ELLIPTICA*, *keravára* K., is a tree of considerable size. Its wood is light and yellow close-grained and in general use for house building. It is like the *Adina cordifolia* only smaller.

163. *NAUCLEA PARVIFOLIA*, *kadavár* K., *kalamb* M., is a larger tree than *N. elliptica*. Its wood is light coloured and close-grained and is much used for house building and cabinet-making. It does not stand exposure and must be kept dry. A seasoned cubic foot weighs about forty-one pounds.

164. *NEPHELIUM LONGANUM*, *kánakindale* K., is a lofty tree with straight trunk and fine globular head. The wood is seldom used being poor and apt to crack.

165. *NOTHOPEGIA COLEBROOKIANA*, Ver. *amberi*, is a small tree whose wood is not used.

166. *ÖCHRÓCARPUS LONGIFOLIA*, *suragi* K., *surangi* M., is a large tree. The wood is little used, but the flowers yield a dye.

167. *ODINA WODIER*, *gojel* K., *moi* M., is a moderate-sized very common tree. The wood is poor, the heartwood alone, which is

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a dull red, being used in house building. A seasoned cubic foot of the heartwood weighs fifty pounds. A gum that oozes from the trunk is used in medicine.

168. *OLEA DIOICA*, *burra nuge*, K., *karambu* M., the Indian olive, is a small tree with light coloured strong and close-grained wood.

169. *OUGEINIA DALBERGIOIDES*, *kari muttala* K., *kála phalas* M., is abundant in parts of Kánara and grows to a fair size. The wood is used for almost every purpose both in house building and for furniture. It is very hard strong close-grained and handsome. It is unharmed by white-ants, and considered fully equal to if not better than teak. A seasoned cubic foot weighs about fifty-eight pounds. An astringent red gum oozes from cuts in the bark.

170. *PÆCILONEURON INDICUM*, *kirballi* K., is a middle-sized evergreen tree, whose hard wood is used for rice pounders.

171. *PAJANELIA RHEEDII*, *bendi beli* K., is a rare and very handsome evergreen.

172. *PHYLLANTHUS EMBLICA*, *nelli* K., *avali* M., is a small tree, common in Kánara and the neighbouring forests of Dhárwár and Belgaum. The wood is poor and is scarcely ever used except for fuel.

173. *PONGAMIA GLABRA*, *thor hongala* K., *karanj* M., grows to a considerable size and is mostly found along the banks of rivers and streams. The wood is light tough and of a yellowish colour. It is put to a variety of uses. An oil expressed from the seed is used for lamps and as a cure for itch and mange. A cubic foot of seasoned wood weighs forty pounds.

174. *PARKINSONIA ACULEATA*, Ver. *vilayti kihar*, is a common roadside and hedge tree in Dhárwár and Belgaum.

175. *POLYALTHIA CERASOIDES*, *vubbina* K., *hum* M., is a straight growing and handsome tree of considerable size. The wood is light coloured, splits badly in seasoning, and is not regarded with favour.

176. *POLYALTHIA FRAGRANS*, *gauri* K., is a large evergreen tree. The wood is not used, but the bark yields fibre.

177. *PROSOPIS SPICIGERA*, *sheme* K., *saundar* M., grows to a good size. The wood is dark-red, hard, and lasting. It is used for house building and for making carts. A seasoned cubic foot weighs seventy-two pounds. A gum oozes from the bark.

178. *PSIDIMUM GUAVA*, *perala* K., *peru* M., the guava tree, besides its fruit yields a small but hard wood which is used for engraving and makes good gun-stocks.

179. *PTEROCARPUS MARSUPIUM*, *honne* K., *ásan* M., grows to a great size in Kánara and is common though smaller in Belgaum and Dhárwár. The wood is particularly prized for idol cars and for the solid-wheeled timber carts which are used in the forests. It is dark, hard, strong, and lasting. It is much used for house building and is altogether a very favourite timber. A seasoned

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cubic foot weighs fifty-six pounds. A reddish gum resin which oozes from the wounds in the trunk is known as *kino* or Dragon's blood.

180. *PTEROSPERMUM RUBIGINOSUM*, *vurachandu* K., grows to a good size. The timber is said to be used in house-building and for other purposes.

181. *PUTRANJIVA ROXBURGHII*, Ver. *putrajiva*, is a middle-sized evergreen tree. It is rather rare and the wood is not used. It gets its name of *putrajiv* or child's life, because the nuts are worn as necklaces by children as a preventive against sickness.

182. *RANDIA DUMETORUM*, *káre gida*, K., *geli* M., is a small tree found in moist forests. The wood is white fine-grained and heavy. The fruit is used to stupefy fish.

183. *RANDIA ULIGINOSA*, *pandri*, K. is a small tree with white fine-grained wood. The fruit is eaten as a vegetable.

184. *SALIX TETRASPERMA*, *boch* M., is found generally near water and on the dams of rice fields. The wood is soft and useless. A cubic foot weighs thirty-seven pounds.

185. *SANTALUM ALBUM*, *gandada* K., *chandan* M., the sandalwood tree, rarely grows more than thirty feet high and four feet in girth. The outer or sapwood is white and useless, but the heartwood is yellow-brown, hard, fine-grained and fragrant. A seasoned cubic foot weighs fifty-eight pounds. The heartwood is used in making ornamental work-boxes, glove-boxes, card-cases, and paper-cutters. A valuable oil is distilled from it and it is burnt as incense in temples. The tree is very common and grows well along the south eastern frontier. The wood is in great demand and sells readily at 10s. to 12s. (Rs.5-Rs.6) a *man* of twenty-eight pounds.

186. *SAPINDUS EMARGINATUS*, *aratála* K., *rita* M., is a good-sized tree with fairly hard and strong but not much used wood. A seasoned cubic foot weighs sixty-four pounds. The fruit is used as soap and the nut yields an oil.

187. *SARACA INDICA*, *ashoka* K., *ashok* M., is a very handsome, middle-sized tree, common in evergreen forests. Though the heartwood is hard and dark coloured, it is not much used. The bright scarlet and gold flowers are a favourite temple decoration.

188. *SCHREBERA SWIETENISDES*, Ver. *moka*, is a moderate-sized tree, not common in the Southern Marátha Country. The wood is hard and close-grained like boxwood. It is used for turning.

189. *SCHLEICHERA TRIJUGA*, *ságáde* K., *kasamb* M., is a very common large and beautiful tree. The wood is much prized for screw-rollers for sugar mills and presses. It is reddish, very hard and heavy, and much used for house building and other purposes. A seasoned cubic foot weighs about sixty-eight pounds. The lac insect is found on the branches, and oil is pressed from the seed.

190. *SEMECARPUS ANACARDIUM*, *ger* K., *bibha* M., the marking-nut tree, does not grow to any size. The wood is soft and useless. The black juice of the fruit is used to mark linen and as a medicine.

191. *SOYMIDA FEBRIFUGA*, *swámi* K., *rainyi* M., is a tree of considerable size. The wood is a dull red and is much used for

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house building. It is lasting and strong, though apt to split and rough to work. A seasoned cubic foot weighs sixty-six pounds. The bark is a febrifuge.

192. *SPATHODEA ROXBURGHII*, *varas* M., is a small tree with soft poor wood.

193. *SPATHODEA XYLOCARPA*, *genasing* K., *kharsing* M., grows to a good size. Its close-grained and rather ornamental wood is used in building and for furniture.

194. *SPONDIAS MANGIFERA*, *amate* K., *ránambáda* M., grows to a very large size. The wood is considered of no value. The fruit is eaten by deer and is also made into pickles. A gum oozes from the bark.

195. *SPONIA WIGHTII*, *bendakarke* K., *karváli* M., known to planters as the charcoal tree, is a rather small tree that springs up where there have been heavy forest clearings and burning. The wood is of no value, but the bark yields a good fibre. A gum oozes from the trunk.

196. *STERCULIA ALATA*, *doddole* K., *sophy* M., grows to an immense height in the evergreen forests. The wood is soft and useless.

197. *STERCULIA GUTTATA*, *happu savaga* K., is a large handsome tree. The wood is not used, but the bark yields good cordage. Further down the coast the bark is made into clothing.

198. *STERCULIA HAYNII*, Ver. *bekaro*, is a medium-sized tree. The wood is not used.

199. *STERCULIA VILLOSA*, *savaga* K., *sánda* M., the wood is soft and useless; but the bark yields an excellent fibre which is much used in making elephant ropes for dragging timber.

200. *STERCULIA COLORATA*, Ver. *khovsay* or *bhakkoi*, is a tree with soft wood found in the dry forests south of Dhárwár. The flowers which appear in the hot season are of a beautiful red and are covered with thick resinous stellate hairs.

201. *STEREOSPERMUM CHELONOIDES*, *bond bále* K., *padvale* M., is a moderate sized tree with tough wood used in house building and for furniture. A seasoned cubic foot weighs forty-five pounds.

202. *STEREOSPERMUM SUAVEOLENS*, *kirsal* K. and M., yields a tough wood which is used for building and furniture. A seasoned cubic foot weighs forty-four pounds.

203. *STRYCHNOS POTATORUM*, Ver. *nermuli*, is an evergreen tree with white fragrant flowers. The seeds are used to clear muddy water.

204. *STRYCHNOS NUX-VOMICA*, *kásarkana* K., *káro* M., is a common, middle-sized tree. The wood is bitter, of a light brown, and unharmed by white-ants. A seasoned cubic foot weighs fifty-six pounds. It is hard and lasting, and is used in house-building and for carts. The seed is the nux vomica of commerce which yields strychnine. The pulp is harmless and is eaten by hornbills, crows, monkeys, and even by cattle. The root is used as a medicine.

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205. *TABERNÆMONTANA VERTICELLATA*, *nágin kada* K., does not grow to a large size. The wood is said to be white, tough, and strong.

206. *TAMARINDUS INDICA*, *hunase* K., *chinch* M., is a very handsome tree of slow growth, but reaching to a great size. It is rarely seen in the forests but is found in gardens, near old temples, and along roads. The wood is hard, dark, lasting, and often finely veined. It is used in screws for mills and presses, also for carts and for house-building. A seasoned cubic foot weighs seventy-nine pounds. The leaves, fruit, and seed are used in medicine and a dye is prepared from the leaves. The fruit is highly esteemed and in times of scarcity the seeds are pounded and eaten. The powder of the thick seeds mixed with gum makes a cement.

207. *TECTONA GRANDIS*, *tegina* K., *ságván* M., the well-known teak tree, yields one of the most valuable timbers in the world. In Kánara it is very abundant particularly along the Kálinadi river, where clear stems seventy to eighty feet to the first branch and up to twelve feet in girth are by no means uncommon. On the Gund plateau one tree has a girth of over twenty-one feet and close to it is another of nineteen feet. But anything over twelve feet with a clean straight and sound stem is rare. In the Belgaum and Dhárwár forests there is much small teak, but except a few square miles in south Belgaum, nothing that will square into more than nine inches of hard wood. The tree grows best on granite and sandstone formations and along ridges, where the drainage is good, and the elevation up to and over 2000 feet. It is raised easily from seed and is largely planted. It also grows rapidly and well from old stools cut level with the ground. The wood though very hard is easily worked and is used for all house building and furniture making. A seasoned cubic foot weighs about forty-five pounds or two pounds more than the Burmah teak. The wood gives a good oil and the leaves yield a red dye.

208. *TERMINALIA ARJUNA*, *hole matti* K., *sávi mádat* M., is an immense tree growing in or along rivers. It is also planted along roads. The wood is used for house and boat building and for various other purposes. It is dark hard and heavy. A seasoned cubic foot weighs fifty-four pounds. The bark is considered an excellent tonic and is laid on wounds.

209. *TERMINALIA BELLERICA*, *táre* K., *goting* M., attains a great height and girth. The wood is yellowish and poor. It is rarely or ever used. A seasoned cubic foot weighs about forty pounds. The tree has a very offensive smell when in flower. The fruit is eaten by deer goats and cattle. It is one of the myrobalans of commerce and is used in dyeing and tanning. An oil is expressed from the kernels.

210. *TERMINALIA CHEBULA*, *alale* K., *hirdā* M., grows to a considerable size and is very common. The wood is dark-brown with a yellowish tinge; it is hard, close-grained, and heavy and is in general use. The fruit, the myrobalan of commerce, is largely used in tanning and dyeing. The right to gather it and export it from Kánara and Belgaum used to be sold yearly and in the seven years.

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ending 1877 yielded an average revenue of £2488 (Rs. 24,880). In 1877-78 the nuts were for the first time gathered by the forest department and yielded a net revenue of £7,696 (Rs. 76,960). The total myrobalan crop of the southern division is estimated at 11,000 *khandis* of 560 pounds worth about £10,000 (Rs. 1,00,000). The cost of gathering is about one-third of the receipts.

211. *TERMINALIA PANICULATA*, *hunáb* K., *kindal*, M., is fully equal in size and shape to the *Terminalia tomentosa*. The timber, though good and in general use, is lighter in colour, and is neither so strong nor so lasting as the *tomentosa*.

212. *TERMINALIA TOMENTOSA*, *matti* K., *ain* M., is a very straight and lofty tree of considerable girth. The wood is dark sometimes almost black. It is hard and lasting, and is in general use for house building and other purposes. A cubic foot weighs sixty pounds. The bark is used in tanning.

213. *TETrameLES NUDIFLORA*, *jermála* K., *ugáda* M., is a very large tree with soft useless timber.

214. *TETRANTHERA LONGIFOLIA*, *hase bende* K., is a fair sized tree, with a yellowish wood used for rafters and other purposes.

215. *THESPESIA POPULNEA*, *adavi bende* K., *rán bhendi* M., is a handsome tree of rapid growth but not of more than moderate size. The timber, when ripe, is strong tough and lasting, and at one time was much used by the gun carriage department. A seasoned cubic foot weighs forty-nine pounds. The capsules yield a yellow dye.

216. *TREWIA NUDIFLORA*, *pitári* M., is a small tree with soft valueless wood.

217. *TROPHIS ASPERA*, *punje* K., *poi* M., is a good hedge plant, but does not grow more than twenty feet high. The wood is said to be fairly good, but is not used. The leaves are used to polish wood and the milk as a medicine.

218. *ULMUS INTEGRIFOLIA*, Ver. *vavali*, is a large leaf-shedding tree with light strong yellow wood used in cart-making.

219. *VATERIA INDICA*, *dhupada* K., is a large and particularly handsome roadside tree. The wood is inferior and not much used. A piney gum resin which oozes from wounds in the trunk yields an excellent varnish like copal. A solid oil is pressed from the seeds called piney tallow or *dhupada* oil.

220. *VIREX ALTISSIMA*, *balage* K., *bandálge* M., is a very large and particularly handsome evergreen. The timber is well known and highly prized. It is of a light brown, close-grained, hard, tough, and very lasting no matter to what use it is put. It is used in house-building, cart-making, and for many other purposes. It does not split or warp. A seasoned cubic foot weighs sixty-three pounds.

221. *VITEX NEGUNDO*, Ver. *nirgunda*, is a small tree or shrub very common along the Sahyádris.

222. *VITEX LEUCOXYLON*, *senkani* K., *songarbi* M., is a middle-sized tree common near streams. The wood is light-coloured and fairly strong. A seasoned cubic foot weighs forty-two pounds.